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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,521	11/05/2003	Denis Babin	2107.0230001	5927

26111 7590 11/17/2005

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EXAMINER
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LUK, EMMANUEL S

ART UNIT	PAPER NUMBER
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1722

DATE MAILED: 11/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/700,521	BABIN, DENIS	
	<b>Examiner</b>	<b>Art Unit</b>	
	Emmanuel S. Luk	1722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/14/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-18, drawn to an apparatus, classified in class 425, subclass 130.
  - II. Claim 19, drawn to a method, classified in class 264, subclass 297.2.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions Group II and Group I are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case, the claimed apparatus can practice another and materially different process wherein the materials of the two different valves are injected at the same time.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Linda Alcorn on 11/9/05 a provisional election was made with traverse to prosecute the invention of Group II, claims 1-18. Affirmation of this election must be made by applicant in replying to this Office action. Claim 19 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claims 1, 3, 4, and 6-11, and 13-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Melcher (3947175).

Melcher teaches a nozzle body (1) having a first valve gating element (18) and second valve gating element (12), a first actuation mechanism (26) and a second actuation mechanism (25). Both materials flow into separate melt channels (11, 20) that links into the outer sleeve (4) of a conventional injection mold with mold cavity (Col. 3, lines 40-45).

Melcher fails to explicitly teach means to drive independently.

It is obvious to one of ordinary skill in the art that the actuation mechanisms (25,26) are capable of independent operation. Melcher describes the mechanisms are

separate drives, thus one of ordinary skill in the art would recognize that the actuation mechanisms are capable of independent operations from one another.

In regards to claim 11, the arrangement of the actuation mechanisms in relation to each other and the mold, Melcher teaches both mechanisms side by side, however, it would have been obvious to one of ordinary skill in the art to modify Melcher so that one mechanism is closer to the mold than the other by changing the placement of the mechanism and changing the length of the connecting rod. Thus, one mechanism would be between the other mechanism and the mold. Melcher already teaches that one of the valve bushing extends,

8. Claims 2 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Melcher as applied to claims 1, 3, 4, 6-11, and 13-18 above, and further in view of Takeda Yoshinobu (JP 2000033634)

Melcher fails to teach the gates linking to separate mold cavities and the location of one of the actuators between the other actuator and the mold.

Takeda teaches a molding apparatus that contains the flows going into separate mold cavities. The apparatus is capable of having one mold flow entering into separate mold cavities (20A,20B).

It would have been obvious to one of ordinary skill in the art to modify Melcher with the channels to enter separate mold cavities as taught by Takeda Yoshinobu because it allows for multicavity injection molding.

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9. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Melcher as applied to claims 1, 3, 4, 6-11, and 13-18 above, and further in view of Osuna-Diaz.

Melcher fails to teach the first gating element extends through the second actuation mechanism.

Osuna Diaz teaches a first gating element (28) that extends through the second actuation element (78).

It would have been obvious to one of ordinary skill in the art to modify Melcher with the actuation element and gating element configuration as taught by Osuna-Diaz because it allows the actuators to be spaced in the same axis and thereby save room.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Stacy (2418856), Bemis (5891381), Manner (5368480), Taniyama (5372496), Babin (2004/0109916), and Gellert (5223275).

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel S. Luk whose telephone number is (571) 272-1134. The examiner can normally be reached on Monday-Thursday 8 to 5 and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Davis can be reached on (571) 272-1129. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EL

Joseph S. Del Sole  
11/14/05  
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